

IN THE CLAIMS:

Please amend claims 1, 5, 9 and 12 as follows.

1. (Currently amended) A method for manufacturing a semiconductor device comprising the steps of:
forming a semiconductor film comprising amorphous silicon and hydrogen over a substrate by using silane which is not diluted with hydrogen;
~~patterning the semiconductor film to form semiconductor islands;~~
introducing the substrate to a chamber for introducing an impurity element to the semiconductor islands film;
preparing an atmosphere comprising a dopant gas diluted with hydrogen;
converting the atmosphere to a plasma by applying an electrical energy thereto; and
introducing an impurity element in the dopant gas into the semiconductor ~~islands~~ film by irradiating a laser light.

2. (Original) A method according to claim 1, wherein the silane is selected from the group consisting of monosilane, disilane and trisilane.

3. (Original) A method according to claim 1, wherein the dopant gas is selected from the group consisting of AsH₃, PH₃, BF₃, BCl₃, B(CH₃)₃, and B₂H₆.

4. (Original) A method according to claim 1, wherein the impurity element is introduced while heating at a temperature from 300 to 500 °C.

5. (Currently amended) A method for manufacturing a semiconductor device comprising the steps of:
forming a semiconductor film comprising amorphous silicon and hydrogen over a substrate by using silane which is not diluted with hydrogen;
drawing hydrogen out of the semiconductor film;
~~patterning the semiconductor film to form semiconductor islands;~~

introducing the substrate to a chamber for introducing an impurity element to the semiconductor ~~islands~~ film;
preparing an atmosphere comprising a dopant gas diluted with hydrogen;
converting the atmosphere to a plasma by applying an electrical energy thereto; and
introducing an impurity element in the dopant gas into the semiconductor ~~islands~~ film
by irradiating a laser light.

6. (Original) A method according to claim 5, wherein the silane is selected from the group consisting of monosilane, disilane and trisilane.

7. (Original) A method according to claim 5, wherein the dopant gas is selected from the group consisting of AsH_3 , PH_3 , BF_3 , BCl_3 , $\text{B}(\text{CH}_3)_3$, and B_2H_6 .

8. (Original) A method according to claim 5, wherein the impurity element is introduced while heating at a temperature from 300 to 500 °C.

9. (Currently amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising amorphous silicon and hydrogen over a substrate by using silane which is not diluted with hydrogen;
~~patterning the semiconductor film to form semiconductor islands;~~
introducing the substrate to a chamber for introducing an impurity element to the semiconductor ~~islands~~ film;
preparing an atmosphere comprising a dopant gas diluted with hydrogen; and
decomposing the dopant gas by applying an electrical energy while irradiating a laser light to the semiconductor ~~islands~~ film.

10. (Original) A method according to claim 9, wherein the silane is selected from the group consisting of monosilane, disilane and trisilane.

11. (Original) A method according to claim 9, wherein the dopant gas is selected from the group consisting of AsH_3 , PH_3 , BF_3 , BCl_3 , $\text{B}(\text{CH}_3)_3$, and B_2H_6 .

12. (Currently amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising amorphous silicon and hydrogen over a substrate by using silane which is not diluted with hydrogen;

drawing hydrogen out of the semiconductor film;

~~patterning the semiconductor film to form semiconductor islands;~~

introducing the substrate to a chamber for introducing an impurity element to the semiconductor ~~islands~~ film;

preparing an atmosphere comprising a dopant gas diluted with hydrogen; and

decomposing the dopant gas by applying an electrical energy while irradiating a laser light to the semiconductor ~~islands~~ film.

13. (Original) A method according to claim 12, wherein the silane is selected from the group consisting of monosilane, disilane and trisilane.

14. (Original) A method according to claim 12, wherein the dopant gas is selected from the group consisting of AsH_3 , PH_3 , BF_3 , BCl_3 , $\text{B}(\text{CH}_3)_3$, and B_2H_6 .

15. (Original) A method for manufacturing a semiconductor device having a semiconductor island including at least source and drain regions and a channel region therebetween, and a gate electrode adjacent to the semiconductor island, the comprising the steps of:

forming a semiconductor film comprising amorphous silicon and hydrogen over a substrate by using silane which is not diluted with hydrogen;

patterning the semiconductor film to form the semiconductor island;

introducing the substrate to a chamber for introducing an impurity element to the semiconductor island;

preparing an atmosphere comprising a dopant gas diluted with hydrogen; and

decomposing the dopant gas by applying an electrical energy while irradiating a laser light to the semiconductor island to form the source and drain region.

16. (Original) A method according to claim 15, wherein the silane is selected from the group consisting of monosilane, disilane and trisilane.

17. (Original) A method according to claim 15, wherein the dopant gas is selected from the group consisting of AsH_3 , PH_3 , BF_3 , BCl_3 , $\text{B}(\text{CH}_3)_3$, and B_2H_6 .

18. (Original) A method for manufacturing a semiconductor device having a semiconductor island including at least source and drain regions and a channel region therebetween, and a gate electrode adjacent to the semiconductor island, the comprising the steps of:

forming a semiconductor film comprising amorphous silicon and hydrogen over a substrate by using silane which is not diluted with hydrogen;

drawing hydrogen out of the semiconductor film;

patterning the semiconductor film to form semiconductor island;

introducing the substrate to a chamber for introducing an impurity element to the semiconductor island;

preparing an atmosphere comprising a dopant gas diluted with hydrogen; and

decomposing the dopant gas by applying an electrical energy while irradiating a laser light to the semiconductor island to form the source and drain regions.

19. (Original) A method according to claim 18, wherein the silane is selected from the group consisting of monosilane, disilane and trisilane.

20. (Original) A method according to claim 18, wherein the dopant gas is selected from the group consisting of AsH_3 , PH_3 , BF_3 , BCl_3 , $\text{B}(\text{CH}_3)_3$, and B_2H_6 .